

LISTING OF THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently Amended) A method for identifying a fault associated with an individual cylinder of a multicylinder combustion engine, the method comprising the steps of:
supplying a fuel supply to all of the cylinders of the engine and accelerating the combustion engine to a first engine speed (~~L1~~);
when the first engine speed (~~L1~~) is reached, interrupting the fuel supply to all cylinders except the individual cylinder, while supplying the individual cylinder with a predetermined amount of fuel supply; and
counting the time it takes for the speed of the combustion engine to decrease from either the first engine speed (~~L1~~) or a second engine speed (~~L2~~), which is lower than the first engine speed (~~L1~~), down to a third engine speed (~~L3~~).
2. (Previously Presented) A method according to claim 1, wherein the step of supplying a fuel supply to all of the cylinders comprises supplying a substantially equal amount of fuel to all cylinders during the step of accelerating the combustion engine.
3. (Currently Amended) A method according to claim 1, ~~wherein~~ further comprising, after the third engine speed (~~L3~~) has been reached, ~~the method further comprises~~ interrupting the fuel supply to the individual cylinder.
4. (Currently Amended) A method according to claim 1, further comprising the step of keeping the speed of the combustion engine at a substantially constant speed lower than the third engine speed, and repeating the method for identifying ~~[[a]] the fault associated with one of the individual cylinders of the combustion engine~~ for a second cylinder of the multicylinder combustion engine.
5. (Previously Presented) A method according to claim 1, further comprising the step of comparing the counted time with a predetermined time representing a deceleration time for a well-functioning one of the cylinders.

6. (Previously Presented) A method according to claim 1, wherein the combustion engine is a diesel engine in a vehicle.

7.-12. (Canceled)

13. (Currently Amended) A method for identifying a fault associated with an individual cylinder of a multicylinder combustion engine, the method comprising the steps of:

supplying a fuel supply to all of the cylinders of the engine and accelerating the combustion engine to a first engine speed (~~L1~~);

when the first engine speed (~~L1~~) is reached, interrupting the fuel supply to all cylinders except the individual cylinder, while supplying the individual cylinder with a predetermined amount of fuel supply wherein the engine speed decreases to a second engine speed; and

counting the time it takes for the speed of the combustion engine to decrease from an engine speed above the second engine speed ~~[[,]]~~ down to the second engine speed.

14. (Currently Amended) A processor-readable medium incorporating a program of instructions operable to run ~~software application operable on at least one of an engine control unit and a computer connected to the engine control unit~~, wherein the ~~software application identifies~~ program of instructions is operable to identify a fault associated with an individual cylinder of a multicylinder combustion engine and comprises:

first instructions operable to control ~~program code that instructs~~ the engine control unit to cause a fuel supply to all cylinders in the multicylinder ~~combustion~~ engine to accelerate the combustion engine to a first engine speed;

second instructions operable to control ~~program code that instructs~~ the engine control unit after the first engine speed is reached to cause an interruption of fuel supply to all cylinders in the multicylinder engine except the individual cylinder,

wherein the engine speed decreases to a second engine speed as a function of the fuel supply being interrupted; and

third instructions ~~the software application is~~ operable to identify the fault associated with the individual cylinder based on a determinable time counted while the speed of the engine decreases to the second engine speed.

15. (Currently Amended) The ~~software application~~ processor-readable medium of claim 14, wherein the time is counted by ~~third program code~~ fourth instructions of the program of instructions.

16. (Currently Amended) The ~~software application~~ processor-readable medium of claim 14, wherein the time is counted by the engine control unit or ~~the~~ by a computer connected to the engine control unit.

17. (Currently Amended) The ~~software application~~ processor-readable medium of claim 14, wherein the program of instructions further comprising ~~comprises~~ a graphical user interface operable on a display[[,]]; and

~~fourth program code for causing~~ fifth instructions operable to cause the control unit or ~~the~~ a computer to display the interface.

18. (Currently Amended) The ~~software application~~ processor-readable medium of claim 14, wherein the ~~software application stores~~ program of instructions is operable to store in a memory at least one criterion for testing the individual cylinder, and

the ~~application program of instructions~~ further comprising ~~fourth program code that checks~~ sixth instructions operable to check whether all of the at least one criterion for testing the individual cylinder is fulfilled.

19. (Currently Amended) The ~~software application~~ processor-readable medium of claim 14, wherein the ~~software application stores~~ program of instructions is operable to store in a memory a time value, and

further comprises ~~fourth program code that compares~~ seventh instructions operable to compare the time value with the time counted by the ~~third program code~~.

20. (Canceled).

21. (Currently Amended) The ~~software application~~ processor-readable medium of claim

14, wherein ~~the third program code counts~~ the third instructions are operable to count the time during which the speed of the engine operating at either the first engine speed or a third engine speed below the first engine speed decreases to the second engine speed.

22. (Currently Amended) A computing device ~~that identifies~~ operable to identify a fault associated with an individual cylinder of a multicylinder combustion engine and ~~comprises~~ comprising a memory ~~which stores~~ operable to store a software application that comprises:

first program code ~~that~~ operable to instruct an engine control unit to supply fuel to all cylinders in the multicylinder combustion engine and to accelerate the combustion engine to a first engine speed;

second program code ~~that~~ operable to instruct the engine control unit after the first engine speed is reached to interrupt supplying fuel to all cylinders in the multicylinder engine except the individual cylinder, wherein the engine speed decreases to a second engine speed as a function of the fuel supply being interrupted and the computing device is operable to identify the fault associated with the individual cylinder based on a determinable time counted while the speed of the engine decreases to the second engine speed.

23. (Previously Presented) The computing device of claim 22, wherein third program code counts the time during which the speed of the engine decreases to the second engine speed.

24. (Previously Presented) The computing device of claim 22, wherein the engine control unit or a computer counts the time during which the speed of the engine decreases to the second engine speed.

25. (Previously Presented) The computing device of claim 22, wherein the device is at least one of an engine control unit and a computer connected to the engine control unit.

26. (Previously Presented) The computing device of claim 22, wherein the third program code counts the time during which the speed of the engine operating at either the first engine speed or a third engine below the first engine speed decreases to the second engine speed.